

REMARKS

The Office Action mailed December 19, 2008 has been received and its contents carefully noted. From the Summary page, claims 29-32 were pending and indicated as rejected. The Drawings filed September 28, 2005 have been accepted. Acknowledgment has been made of Applicants' Claim for Priority. The Information Disclosure Statements filed June 19, 2006 and September 28, 2005 have been considered.

By this response, Applicants have canceled claims 29-32 and added new claims 33-37. New independent claim 33 recites similar subject matter as provided in canceled claim 29. Support can be found in FIGs. 11A-C and 13A-B. New claims 34 and 35 also are supported by FIGs. 11A-C and 13A-B. Claims 36 and 37 recite features similar to the first paragraph of canceled claim 30. No statutory new matter has been added. All claim amendments are supported by the originally filed disclosure.

Claim Rejections – 35 U.S.C. § 112, second paragraph

Claims 29-32 stand rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. In view of the rejections, Applicants have deleted claims 29-32 and have added new claims 33-37 so as to better define the present invention.

In regard to the new claims, Applicants submit that term "cells" is clear from FIGs. 5 and 8, and paras. 98-104 of the PG Publication 2006/0228195. The cells are delineated by the double line in FIG. 8. The new claims also recite "Figures". For instance, a second "figure", formed of the second cell group representing the transfer schedule of the second lot, is shifted along the time axis toward the first "figure", formed of the first cell group representing the transfer schedule of the first lot. In this regard, see FIGs. 9B-C, 11B-C and 13B.

As such, Applicants earnestly solicit withdrawal and reconsideration of the rejection as to claims 29-32 and favorable consideration of claims 33-37 in light of the explanation above.

Claim Rejections – 35 U.S.C. § 102 (b)

Claims 29-32 stand rejected as being anticipated by Tateyama (U.S. 6,507,770). The rejection as to claims 29-32 is moot due to claim cancelation.

Rationale for Patentability of claims 33-37 over Tateyama

Applicants respectfully submit that Tateyama fails to teach or suggest the features of claim 33. As an initial matter, Applicants remind that Tateyama and the present invention both are owned by a common assignee. In Tateyama's technique, schedules of wafers relative to modules are respectively adjusted module by module. In particular, Tateyama provides a selecting portion for obtaining start/completion prediction times for first and second substrates in at least two processes, in order to select at least one optimum processing unit for optimizing the process. See col. 2, ll. 19-41. By so doing, lots can be successively processed in the shortest temperature control time by selectively timing when power is to be supplied. See col. 3, ll. 55-64. Therefore, power consumption is reduced. See col. 3, ll. 25-20.

By contrast, Applicants' invention discloses a schedule of each lot of substrates relative to modules treated as one lump for its adjustment. Thus, Applicants' control section recognizes the first **SA** and second **SB** transfer schedules of the first **A** and second **B** lots of substrates as first and second figures on the transfer control table **70**. See FIGs. 9B-C and 11B-C. Note that the area of the first and second figures are contoured by the cells of the wafer identification information **75**.

The control section shifts the second figure (i.e., the second cell group representing the second schedule **SB**) toward the first figure (i.e., the first cell group representing the first schedule **SA**) along the time axis (i.e., y axis) so as to modify the second transfer schedule **SB**. Preferably, shifting of the second transfer schedule **SB** continues until a front side of the second figure comes into contact with the first figure (i.e., B1 makes contact with A5 in FIG. 11C). By so doing, the transfer and operations for the second lot **B** of substrates can be started while transfer and/or process operations for the first lot of substrates is still being performed. In the preferred arrangement, the substrate of the second lot **B** never gets ahead of the substrate of the first lot **A**. Accordingly, the process of the second lot **B** can be started earlier, so that the total process time of the first **A** and second **B** lots becomes significantly shorter. A comparison of the processes in FIGs. 11B and 11C suggests a reduction in time of approximately 240 seconds. See para. 120. As such, throughput is improved considerably.

Since Tateyama schedules adjustments module by module, it fails to teach or suggest, "*a second function of modifying said second control transfer schedule by use of said transfer*

control table, said second function is preset to recognize a first cell group of cells defining said first transfer schedule as a first figure and a second cell group of cells defining said second transfer schedule as a second figure on said transfer control table, and to shift said second figure toward said first figure along the time axis to modify said second transfer schedule within a range in which said second figure does not interfere with said first figure". Therefore, new claim 33 patentably distinguishes Tateyama. As such, Applicants' respectfully request that claim 33 and claims 34-37, dependent thereon, stand in condition for allowance over Tateyama.

CONCLUSION

All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

If any fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033082 M 278.

Respectfully submitted,
SMITH, GAMBRELL & RUSSELL, LLP

By: _____



Michael A. Makuch, Reg. No. 32,263
1130 Connecticut Ave., N.W., Suite 1130
Washington, D.C. 20036
Telephone: (202) 263-4300
Facsimile: (202) 263-4329

Dated: March 19, 2009

SGRDC\330414.3